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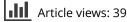
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#### RESEARCH ARTICLE



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# Mapping higher education policymaking in Ghana with a quadruple helix framework

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#### ABSTRACT

Whilst research works have identified many actors involved in higher education public policymaking in the Ghanaian context, there is a paucity of empirical studies on how the application of a quadruple helix network of policy actors considered essential constituents of higher education provision could create added value to strengthen the policymaking ecosystem in Ghana. Using multiple data collection techniques including, document analysis, in-depth interviews and analytic memoing, this paper examines deeper insights into higher education public policymaking in Ghana from the perspective of a quadruple helix framework of policymaking and argues for an added value in the use of quadruple helix framework in higher education policymaking. The emerging issues show that higher education public policymaking in Ghana does not involve the key quadruple helix of actors in the higher education provision equitably to create a sufficient coalition for policy implementation. Additionally, the emerging issues indicate that the minimal use of research evidence appears to be a major hindrance to a progressive and transformative higher education policymaking in Ghana. Against the backdrop of the emerging issues, we conclude that ineffective use of quadruple helix network of actors in higher education provision contributes to higher education policy implementation challenges in Ghana.

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#### **KEYWORDS**

Higher education policymaking; quadruple helix model; Ghana

# **1. Introduction**

Higher education is regarded as fundamental to the achievement of many national priorities (Bolton 2014) and as such requires the right public policies to play its critical role in society effectively. This calls for the right public policymaking ecosystem for higher education systems. Right public policymaking for higher education requires the participation of essential actors in higher education providers who possess the knowledge base needed for making progressive higher education policies. The actors in public policymaking may be regarded as policy entrepreneurs who promote certain policies by influencing

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agenda setting and leveraging on windows to translate their ideas into policy solutions (Weible 2018; Bacevic and Nokkala 2020). There are also those labelled epistemic community actors who are concerned with and gather around policy issues and problem definitions based on scientific knowledge (Zito 2018). In addition, discourse coalitions or discursive agent actors exist who share a perception of how to present and frame issues in policymaking (Leipold and Winkel 2017). Finally, there are policy instrument constituency actors who gather around a specific instrument type, indifferent to the policy field (Béland and Howlett 2016; Simons and Voß 2017).

Regardless of the labels given to the actors involved in the public policymaking, it is important to ensure they represent the required constituencies in the ecosystem of higher education provision. The need to ensure adequate representation of the key actor groups in the provision of contemporary higher education has resulted in an emerging argument to use quadruple helix model to determine actor group participation in public policymaking (Leydesdorff 2012; Cai and Lattu 2019). It is believed that quadruple helix network of essential actors in higher education provision brings innovation and adds value to higher education policymaking by not only broadening the knowledge base but also improving the democratic space for policymaking (Cai and Lattu 2022).

Meanwhile higher education systems in Africa face developmental challenges attributable to ineffective public policies (Brock-Utne 2003). It is believed that in the beginning of the Millennia, the dominance of the World Bank and other donor countries in educational policies in Africa resulted in the underfunding of Africa's higher education systems which adversely affected independent and critical research capabilities of African universities (Brock-Utne 2003; Samoff and Carrol 2003). The World Bank and donor countries were dominating higher education public policymaking in Africa as policy entrepreneurs influencing agenda setting and leveraging on windows to translate their ideas into policy solutions (Banya and Elu 2001). Brock-Utne (2003) argued that Africa needed to become independent in its higher education policy space by weaning itself from colonial influence. Some researchers believed that an independent Africa in higher education policymaking could lead to context relevant and progressive policies to make higher education in Africa more effective and efficient (Kruss 2004; Jowi 2009; Brock-Utne 2003). To this end, research works in recent times suggest some African countries appear to have demonstrated autonomy and responsibility for higher education policymaking in their higher education systems (Tchoula 2020; Ogunode and Musa 2020).

Whilst research works identified a number of actors involved in higher education public policymaking in African contexts (Tchoula 2020; Ogunode and Musa 2020; Ansah et al. 2021), there is a paucity of empirical studies on how the application of quadruple helix network of policy actors considered essential constituents of higher education provision could create added value to strengthen the policymaking ecosystem in Ghana. Empirical studies on the application of quadruple helix network of policy actors could provide insights on a broader knowledge base for higher education policymaking ecosystem to draw on to produce progressive and transformative policies for delivering quality higher education outcomes. Therefore, empirical research is required to focus on higher education public policymaking in Ghana to map the essential network of actors in the provision of higher education and their involvement in public policymaking so that the essential knowledge sources can be harnessed to add value to the policymaking ecosystem.

This paper is an offshoot of a study undertaken to map higher education policy actors, processes, and mechanisms in Africa. The study was dubbed 'Mapping Higher Education Policy in Africa (MHEPA)' and it had one main objective. The study primarily aimed to identify key public policy actors, strategies and processes in higher education public policymaking using selected African countries as typical cases to provide insights into the higher education public policymaking ecosystem of the African continent. In this depiction, the study intended to establish the key stakeholders in the higher education public policymaking of actor dynamism, strategies and processes in which higher education public policymaking practices and potential challenges to progressive higher education public policymaking with a transformative agenda for African higher education systems.

However, this paper's focus is on Ghana as one of the case study countries in the MHEPA study. The involvement of Ghana in the MHEPA study was dictated by the interest of the research funder (Carnegie Corporation of New York); however, we believe there is a compelling reason to represent the Ghana case in the scholarly discourse of higher education public policymaking because of the front-runner role of the country in higher education development in the region. Ghana is acknowledged to be among the torchbearers of post-colonial higher education policymaking in Anglophone West Africa (Poloma and Szelényi 2019; Morris 2016). In addition, recent developments in the higher education policy implementation space in Ghana suggest an inadequate coalition for policy implementation as a result of perceived marginalisation of key actors in the higher education provision. For example, efforts by the Ghanaian government to pass a Public University Bill failed because academia and other actor groups resisted the passage of the Bill on grounds that they were not sufficiently engaged in the policymaking (Awotwe, Acquah, and Agyapong 2021).

Understanding the value of the quadruple helix network of actors in higher education public policymaking in Ghana could be practice-imperative for improving the public higher education policymaking to generate sufficient coalition for higher education policy implementation in the country. Thus, this paper seeks to stimulate discussions on higher education public policymaking practices in Ghana in the context of quadruple helix network of actors in higher education provision. We believe these discussions could lead to a transformative public policymaking ecosystem where all relevant knowledge sources are harnessed and power dynamics adequately managed to drive good public policies for quality higher education outcomes. Thus, the research questions this paper answers are:

- 1. How does higher education public policymaking in Ghana engage the essential network of actors in the ecosystem of higher education provision?
- 2. How does power play manifest in the ecosystem of higher education policymaking in Ghana?
- 3. Which sources of knowledge dominate the higher education public policymaking in Ghana?

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To provide a specific contextual perspective to these research questions, the next section presents a brief country data and higher education policymaking setting of Ghana where this paper is focused.

# 2. Portraits of higher education and policymaking context in Ghana

Ghana, one of the sites for this study is a republican state located on the West Coast of Africa, bordered to the west by republic of Côte d'Ivoire, to the east by republic of Togo, to the north by republic of Burkina Faso and to the south by the Gulf of Guinea. Ghana's population is approximately 31 million with females accounting for 50.7% whilst males makeup 49.3% (Addo 2020). Ghana inherited its higher education (HE) system from Britain. Its HE sector includes universities and non-university institutions. The universities are a mix of public and private, national and international institutions, whilst the non-university sector includes nurses training colleges, colleges of education and several national or international specialised colleges (Ghana Tertiary Education Commission 2022). As of 2022, the HE landscape comprises 15 public universities, 10 public technical universities, seven public degree awarding and professional institutions, 65 public nurses training colleges, and four colleges of agriculture (Ghana Tertiary Education Commission 2022). The private higher education institutions are made up of one private polytechnic, 17 private nurses training colleges, four private colleges of education, two distance learning institutions, seven chartered private higher education institutions, five registered foreign institutions, 10 tutorial colleges, and 110 private tertiary institutions offering Higher National Diploma/Degree Programmes and one regionally owned (Ghana Tertiary Education Commission 2022). The Enrolment in Ghana's HE sector has increased steadily in the last decade. Gross enrolment was 18.69% in 2020, an increase from 12.14% in 2011. Ghana's HE participation rate (16.16%) even though is lower than the global average, it is higher than Africa's average (6%). HE is mainly funded by the Government, but the budget allocated to the sector falls short of the funds required by the higher education institutions, negatively impacting on their operations (Bailey et al. 2011). Concerns over quality have led to the establishment of the Ghana Tertiary Education Commission, a regulatory body to ensure guality, financial sustainability and relevance of their operations to national development (Ghana Tertiary Education Commission 2022). Ghana's quest to sustain its economic growth and seek competitive advantage in the globalised economy requires her to develop quality policies for its higher education sector.

The policymaking environment of higher education in Ghana dates back to 1948 under the public policy regime of the colonial government of the United Kingdom. Since then, Ghana has undertaken several higher education policy initiatives at the national level targeted at realigning and improving higher education provision in the country. Ansah et al. (2021) in their recent mapping of higher education policies in Ghana identified 13 higher education relevant policy regulatory frameworks from 1951 to 2019 intended to guide higher education delivery in the country. The authors revealed in their study that 10 of the 13 policy frameworks were homegrown policies, indicating a situation of policy autonomy at the country level. The literature suggests that Ghana has been progressive in weaning itself from colonial legacies of higher education policies and set its own higher education policy agenda (Ansah et al. 2021). The policymaking autonomy has led to major reforms in the last two decades that have increased enrolment rates in public higher education institutions and the accreditation of more private higher education institutions to meet the growing demand for higher education in the present knowledge economy (Morley, Leach, and Lugg 2009). It is claimed that, policy on institutional autonomy for higher education institutions has given Governing Councils full responsibility for institutional governance, including the appointment of senior officers (Morley, Leach, and Lugg 2009). Nonetheless, recent developments in the higher education policymaking space suggest the perceived marginalisation of key groups of actors in the provision of higher education which has negatively impacted the policymaking processes. It appears the policymaking dynamics do not reflect harnessing the knowledge base of the quadruple helix network of actors to support progressive and transformative higher education policymaking in the country. Tchoula (2020) reports an increasing importance of the voice of a number of national actors in the higher education policymaking space in Ghana. It is still unclear whether these national policy actors are sufficient representation of the major constituencies in the quadruple helix network of actors in higher education provision. Besides, sources of knowledge that are brought to the table of higher education policymaking, and the power dynamics involved are missing in the higher education policymaking discourse of the country. To this end, the proposed analytical framework for exploring the dynamics of higher education public policymaking ecosystem in Ghana is discussed in the next section.

# 3. The analytical lens of the study

This study employs the guadruple helix model as an analytical framework to argue for the four essential actors in higher education provision to partake in higher education public policymaking adequately to add value to the policymaking ecosystem to produce progressive and transformative policies for quality higher education outcomes. Quadruple helix is a model that describes government-academia-industry/business-civil society relationships and interactions in any activity (Carayannis 2014). The overall logic behind the adoption of the quadruple helix analytical framework is that public policy is ultimately made by the government but the ideas come from different sources including non-governmental actors (Birkland 2016). This suggests that the processes and mechanisms are influenced by other policy actors in addition to governments who add to the knowledge base and complexity of power dynamics involved in policymaking. Traditionally, the triple helix (government-academia-industry) model of actors of higher education public policymaking has been emphasised (Goedegebuure et al. 1994). However, in recent times, the addition of a fourth helix represented by civil society in the higher education policymaking has emerged due to the critical role of civil society organisations in higher education (Moonga 2020). The paper finds the addition of civil society organisations compelling enough and adopts the quadruple helix model as the analytical framework instead of the traditional triple helix model of government-academia-industry. This implies the mapping of the higher education public policymaking actors in Ghana extended beyond the traditional depiction of government, academia, and industry as the most important stakeholders in higher education policymaking. The paper considers civil society organisations as useful candidates to participate actively in higher education policymaking. The first element of the quadruple helix logic is that though government's role

in higher education policymaking in certain jurisdictions used to be seen as facilitative or interventional (Goedegebuure et al. 1994), it has been argued that all public policy decisions are ultimately made by the government (Birkland 2016). The second element of the logic implies that government does not direct those policies that are at the heart of academia such as patterns of participation, internal governance, academic programme development, and autonomy, academia becomes an important actor in the higher education public policymaking (Reale and Primeri 2015; Bacevic and Nokkala 2020). The third element of the logic also argues that given the role of the private sector (represented as the industry in the quadruple helix model) in terms of provision and funding of higher education, it must be sufficiently represented in higher education public policymaking (Kwiek 2017; Villalba 2015). The fourth element of the logic is premised on the fact that in many countries, civil society organisations have emerged to focus their research and advocacy activities on issues in higher education.

For conceptual clarity, the government in this study refers to the State and its agencies, either at the national or supranational levels, who are authorising agents of public higher education policy. Academia is used to denote higher education institutions that represent the implementing agency of higher education public policy. The industry is used as a broad term for private businesses and corporate entities that are not just end-users of higher education services and products but also establish their own higher education institutions. Finally, civil society refers to not-for-profit organisations whose purpose is to advocate equitable higher education services to citizens, especially the vulnerable groups.

Accordingly, a generic quadruple helix in higher education policymaking is conceptualised in Figure 1. The depiction in Figure 1 implies that the government, industry, academia, and civil society are considered the key stakeholders in the higher education public policymaking ecosystem who interact to produce public policies to drive higher education outcomes.

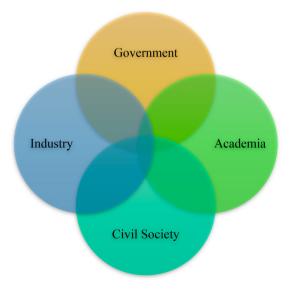


Figure 1. The concept of quadruple helix actors in higher education public policymaking.

The original triple helix and its extended version of quadruple helix model are not without critics. The model has been criticised as being a normative concept that has weak theoretical grounding (Cai and Etzkowitz 2020). The critics argue that it has limited explanatory power for many practical issues when comparing between different contexts (Cai 2014, 2015). Nonetheless, the critics acknowledge that the model represents a critical and sometimes stringent base for reflection on dynamics (Cai and Etzkowitz 2020). It is argued that the model helps to analyse potential synergies among the dynamics of the network of actors (Leydesdorff 2012; Cai and Lattu 2019).

Although, we acknowledge the limitations of the quadruple helix model pointed out by critics, we, however, adopted the model as our analytical framework based on its strengths in analysing potential synergies among dynamics involved in the network of actors whose contributions could improve higher education public policymaking. By adopting this model as our analytical framework, we are able to explore our data on the higher education policymaking ecosystem in Ghana in terms of how the essential actor groups in the provision of higher education are involved and the synergies of their knowledge sources utilised to improve higher education policymaking. We admit it provides weak comparisons under different contexts, but our aim is to provide deeper insights into individual case basis rather than focus on comparison as to which country does better regarding higher education public policymaking. Having articulated our analytical framework, we turn attention to the study design and methods of the paper in the next section.

# 4. Study design and methods

As indicated earlier, this paper is based on a study commissioned to examine higher education policymaking across three major Sub-Saharan Africa regions, namely: Eastern Africa, Southern Africa, and Western Africa. However, the focus of this paper is on Ghana whose selection for this paper has been justified under Section 1. In this section, we discuss the study design and the methods used for this paper.

#### 4.1. The research design

The MHEPA study on which this paper is based adopted a methodology that allowed for the incorporation of ideas, notions, thoughts, and feelings of the study participants as the major focus of the inquiry (Ary et al. 2014). The focus positioned the research not only in a qualitative inquiry domain but specifically in qualitative case study design. A multiple-case study design was employed to gain richer insights into the different contexts of higher education public policymaking (Yin 2018) in Africa of which Ghana happens to be one of the study settings.

#### 4.2. Sampling and data sources

The paper draws on multiple data sources – both primary and secondary – for the Ghana case study, obtained through documents, in-depth individual interviews, and analytic memos from conferences and webinars utilising purposive sampling technique.

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The documents involve refereed publications on higher education policies on Ghana; and policy documents from official websites of government agencies for higher education including the Ministry of Education (MoE) and Ghana Tertiary Education Commission (GTEC). Essentially, we sourced these documents with the goal of identifying key higher education public policymaking actors in Ghana so that we could further engage them for their perspectives on quadruple helix ecosystem of public policymaking for higher education in Ghana.

Individual interviews were conducted with 10 higher education policy actors from government, academia, industry and civil society, although about 30 individuals were invited to participate in the in-depth individual interviews. Majority of the individuals invited for the in-depth interviews could not participate in the end. The seemingly low participation rate in the in-depth individual interviews is a characteristic of conducting elite interviews in Ghana (Nudzor 2013); nonetheless, we made efforts to ensure that the 10 invitees who responded had representations from the quadruple helix concept of policy actors which framed our study. Eventually, two Professors and two Vice Chancellors; two Senior Officers of the Education Ministry; two Executive Directors of Higher Education Think Tanks; and two (2) Executive Directors of private corporations involved in higher education, representing academia, government, civil society organisations and industry participated in the in-depth individual interviews. Most of the interviewees had not only participated in higher education public policymaking in Ghana representing their constituencies, but also served as consultants for Ghana and West African higher education public policymaking. For example, whilst the study was in progress, some of the participants were part of different national and international policy dialogue on public higher education policy platforms as discussants and presenters.

The analytic memos were captured from participating in two conferences on higher education in Addis Ababa in Ethiopia and Abuja, Nigeria in July and October 2019 respectively; and three webinars organised by the Association of African Universities (AAU) in 2020. The webinars were titled 'Quality Assurance Workshop for the 21st Century Higher and Tertiary Education Personnel'; 'Quality Assurance in Higher and Tertiary Education Learner-Centred Teaching Skills'; and 'The Foundations of Education', and 'African Academic Diaspora Homecoming for 2020'. Most of the interviewees for the in-depth individual interviews were participants of these conferences. We used purposive and snowballing sampling techniques to identify them to participate in the study. The data collection procedure employed is discussed in Section 4.3.

# 4.3. Data collection procedure

The data collection started with document analysis through critical literature review method which is not about reviewing and synthesising a representative literature but focused on a creative collection of data to combine insights and perspectives to extend a framework or theory to serve a purpose (Snyder 2019). The critical literature review method allows for a combined review of scholarly studies and publicly available official documents that provide insights and perspectives to make a conceptual contribution to knowledge (Snyder 2019). Given that we seek to provide a basis for using the quadruple helix framework in higher education public policymaking in different African contexts, we need creative data sources that provide insights and perspectives on the higher

education policymaking ecosystem from the chosen contexts. We reviewed refereed publications on higher education policies in Ghana; and documents from official websites of the country for biographic data and information on higher education policies and reforms.

At the next stage of data collection, we participated in higher education policy-related conferences in Addis Ababa in Ethiopia and Abuja, Nigeria in July and October 2019, respectively. At the conferences, we made proposal presentations on the research objectives and questions, where we received feedback in the form of answers to our research questions used to guide the study from which we captured relevant data in the form of analytic memos. We subsequently registered and participated in webinars organised by the Association of African Universities (AAU) in 2020. The webinars were titled 'Quality Assurance Workshop for the 21st Century Higher and Tertiary Education Personnel'; 'Quality Assurance in Higher and Tertiary Education Learner-Centred Teaching Skills: The Foundations of Education'; and 'African Academic Diaspora Homecoming for 2020'. These webinars witnessed a gathering of academics, government officials, members of professional associations, members of student associations, and executives of Think Tanks based in Africa. Through our interactions with the policy actors who served as panel members and participants, we captured data as analytic memos. We also partook in an education policy dialogue organised in Ghana in 2020 via television. Through the narrations of the panel members and the participants, they shared their perspectives and experiences on the phenomenon of higher education policymaking and we captured data in the form of memos.

Lastly, we developed an interview guide and conducted in-depth interviews with 10 key higher education policy actors from Ghana. Introductory letters from the coordinating university, University of the Western Cape in South Africa that gave ethical clearance for the study, were emailed to invite 30 policy actors identified through our participation in the conferences, webinars, policy dialogues, document review, and our networks. These were persons whose policy activities were at the national level of Ghana. These policy actors operate at the Education Ministry and its Agencies, Academia, Industry and Civil society organisations who are acknowledged to be knowledgeable and experienced in public higher education policymaking (Becker, Bryman, and Ferguson 2012). The invitation to them was followed up with phone calls, emails, and WhatsApp correspondence to ensure a high participation rate. Twelve (12) contacted policy actors did not respond to our invitation. Eight (8) policy actors accepted to participate in the study but later declined giving no reason. In all, in-depth interviews were conducted with ten (10) policy actors, using an interview guide for consistency and to enable us to explore the key research questions.

The interviews were conducted between July and November 2020 virtually using Zoom and Google meet. The interview duration varied and lasted between 45 minutes to one hour each. All the interviewees offered informed consent before the interviews and were assured of anonymity and confidentiality. The interviews were audio-recorded to enhance accuracy in transcription (Team 2003).

#### 4.4. Data analysis

We used thematic analysis for all the datasets, that is, documents, transcriptions and memos. The analysis entailed selecting, appraising, and synthesising the data to draw

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meaning and discover relevant insights (Bowen 2009; Gorichanaz and Latham 2016) into higher education policymaking and practices in the case countries. The research questions became our framework for coding, generating and classifying themes that emerged from the different datasets. We manually coded, categorised, and thematically analysed the datasets together to make meaning (Ary et al. 2014) in line with the research questions of the study. We did the analysis through a five-stage process proposed by Braun and Clarke (2020). The first stage began with familiarising ourselves with the data and writing familiarisation notes. The second stage was systematically coding the data; and generating the initial themes at stage three. We refined the themes in stage four and classified them under the research questions at stage five. The themes refined and classified have been presented under the findings in Section 5.

# 4.5. Ethical consideration

The study's proposal was reviewed by the Institutional Review Board of the University of the Western Cape in South Africa and received ethical clearance for the study to proceed. University of the Western Cape consequently provided an introductory letter to the research team members for the data collection exercise. At any data collection point, participants' consents were obtained and confidentiality were assured. Data have been completely de-identified and where participants' quotes have been used, they are no links to their individual or institutional affiliation identities.

# **5. Empirical findings**

In this section of the paper, we focus on presenting empirical findings that address the issues of the network of actors involved in higher education public policymaking in Ghana from the perspective of quadruple helix network of essential actors in higher education provision. The findings are based on the collective analysis of the different datasets of the study, namely: document reviews, interview transcripts and analytic memos. We present the findings in terms of the emerging issues on how existing key actor groups in higher education providers are involved in the policymaking ecosystem; the dominant knowledge sources for policymaking; and the power dynamics involved in the policymaking ecosystem. We also present emerging issues on existing challenges to progressive and transformative higher education public policymaking in Ghana from the standpoint of quadruple helix model.

# 5.1. The key actor groups involved in the higher education policymaking

Regarding how the network of essential group of higher education actors are involved in higher public policymaking, a number of issues emerged. The findings show that there are efforts at engaging the essential group of actors in the provision of higher education in the policymaking ecosystem, although the actor groups participation is based on the specific role they are required to play in the policymaking. Some actor groups are regular at the policymaking table whilst others appear irregularly.

The study participants believe that when it comes to higher education public policymaking, efforts are made to ensure that the governments, academia, employers, and funding organisations are engaged at the policymaking table, although not all actor groups are regular at the table and equitable representation is yet to be realised. A respondent puts it this way, 'in higher education policymaking, the employers are there, academia is there, the government is there and funders are there; they are very important (an academia informant – A former Vice-Chancellor of a University)'. A number of participants at the conferences, webinars and policy dialogues expressed similar positions in their contributions regarding the involvement of essential actors in the provision of higher education in the country. Other participants also perceived that professional bodies, and civil society organisations are involved in the policymaking enterprise occasionally. A participant articulated attempts at using quadruple helix composition of higher education actor groups in policymaking. The participant narrates it this way,

It's all about what we have been talking about; some people describe it as the triple helix in higher education where we have to get government, industry, and academia coming together and now people are saying civil society must be included as the fourth component (a civil society informant – An Executive Director of a think tank for education in Ghana).

It is, however, not clear whether such a quadruple helix composition has ever happened in typical higher education public policymaking in Ghana. The findings do not show other participants supporting the quadruple helix narration in practice. The responses clearly indicate that at the policymaking table, it rarely happens that equitable representation of the quadruple helix actors of government-academia-industry-CSO is realised.

The participants also spoke to issues of actor groups' regularity and irregularity of participation in the policymaking based on the roles the groups play in particular policymaking situations. For example, the government's presence at the policymaking table is seen as not negotiable in all policymaking situations because the government is regarded as initiating all higher education public policies officially, regardless of whoever conceives the policy agenda. A respondent states it as, 'Well, for all higher education public policies, the government is the official initiator irrespective of whoever conceives the idea; it is only the Ministry of Education that officially initiates policies and it is always at the policymaking table'. The view that the government is a constant actor group in all higher education policymaking situations is held by all who spoke to the issue in all the data sources. However, this regularity of participation cannot be said about the remaining actor groups. For instance, on actor group like civil society, the participants perceived it as irregular member on the policymaking table because its participation is seen when the groups are pushing a particular higher education policy agenda. A participant captures civil society actor group participation as,

When it comes to higher education policies, they can be championed by civil society organisations and in that case, the group will actively use every strategy to contribute to the policymaking (a civil society informant – the executive director of a think tank for education in Ghana).

This suggests a situation of voluntary participation based on interest than officially predetermined composition of the policymaking ecosystem.

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# 5.2. Sources of knowledgebase for higher education public policymaking

The findings indicate that varied sources of the knowledge base are drawn upon for higher education policymaking. The study revealed that the knowledge base for higher education policymaking seems to come from political manifestos, practitioner experiences, and policy borrowing and research findings. However, the common inclination of participants is that the knowledge base used for higher education public policymaking in Ghana is primarily policy borrowing and party-political manifestos. One participant put it as, 'We rely on policy borrowing instead of policy learning; policy borrowing is something that means that you pick from other countries and put it in your context without understanding the differences in contexts (an academia informant)'. Another added, 'In the past four or five years, we have seen some policies emerging through political party manifestos (a civil society organisation informant)'. It also emerged that the use of research evidence for higher education policymaking is negligible from the standpoint of the study participants. One participant bluntly stated, 'We need to look at what research is telling us but we do not have a compendium of evidence that has come through from research about what we need. (An industry informant)'.

The findings portray the policy borrowing knowledge sources as coming from countries and multilateral organisations that provide funding support to the country. A participant captures it succinctly in this is way, 'Thinking through tertiary education policy, for instance, you will find that most of the policies are, you know, donor-driven because they provide the money and therefore become the most powerful actors influencing the policymaking (a civil society informant)'. The donor-driven knowledge source dominance in higher education public policymaking in Ghana appeared to be a common view of the study participants as reflected in the various datasets obtained.

# 5.3. Power dynamism in higher education policymaking in Ghana

The findings show that power play and tensions are evident in higher education policymaking in Ghana. The study participants believe that the power play and the tensions among the actor groups are often caused by national electoral politics and donor-funding motivations. The quest to fulfil political party manifestos and the desire to satisfy donor-funding demands creates tensions between the government on one hand and the other actor groups on the other hand. Participants from Ghana described the power dynamism in the higher education public policymaking vividly in the following quotes:

... They said in their political manifesto that they were going to convert polytechnics to technical universities which after winning the election to form a government they were burnt on fulfilling their promise so all the other actors became powerless (an academia informant).

Thinking through tertiary education policy, for instance, you will find that most of the policies are, you know, donor-driven because they provide the money and therefore become the most powerful policymaking influencers at the table (a civil society informant).

As could be seen from the participants' quotes, certain higher education policy options are pushed through because they are either from the manifestos of the political party in government or they are backed by donor funding. In such instances, some categories of the policy actors become less powerful and influential irrespective of their knowledge base concerning the policy under consideration, indicating a situation of power asymmetry among the actor groups in the policymaking ecosystem.

# 5.6. Existing challenges in higher education public policymaking in Ghana

The study informants articulated certain challenges that constrain effective higher education policymaking in Ghana. One of the challenges is inadequate national funding for higher education policymaking which makes the national policymaking actors vulnerable to the dictates of donor funding agencies and countries. This was forcefully articulated by a participant at a national policy dialogue as, 'Thinking through tertiary education policy, for instance, you will find that most of the policies are, you know, donor-driven because they provide the money and therefore become the most powerful actors at the table (a civil society informant)'. This assertion suggests that there is minimal latitude for national policy-making actors to push through sufficient local content in the higher education policies.

Another challenge of higher education policymaking in Ghana is the absence of consensus-building among actors in the policymaking ecosystem. Inadequate consultations and collective decisions on policy proposals were highlighted in the data. A participant stated, 'In most cases, the challenge with higher education policymaking is the absence of quality stakeholder consultations and collective decision-making; there are hardly any public debates on higher education policy proposals (a civil society informant)'. Similar sentiments were expressed by other participants. The inadequate consultations and collection decision is perceived as a challenge probably because other essential actors do not get the opportunity to enrich the policy proposals with their inputs.

Additionally, governments' obsession with turning political manifesto promises into higher education policies directly after winning an election was perceived as a challenge to progressive higher education policymaking. A participantant retorted,

They said in their political manifesto that they were going to convert polytechnics to technical universities which after winning the election to form a government they were burnt on fulfilling their promise so all the other actors became powerless (an academia informant).

This is a representative quote from one participant to express how governments' obsession with political party manifesto promises is a challenge to progressive higher education policymaking.

Furthermore, inadequate higher education policy research to build a compendium of evidence required for making good policies was one of the challenges to progressive public policymaking highlighted by the study participants. This was stated bluntly by a participant as, "I would have expected that one would think that government looks at the outcome of the research. I'm not sure they have time to listen to research, but when there is pressure from funders, the government also succumbs (a civil society informant – A Director of a Think Tank group for education)". The participants perceive that research is not given its proper place in the policymaking enterprise.

#### 6. Discussion

The apparent implication of the findings indicates that the network of actor groups in the higher education policymaking ecosystem in Ghana appears to reflect a superficial

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quadruple helix (government-academia-industry-civil society) model in use. This is because the depiction of actor groups like industry and civil society involvement in higher education public policymaking is considered as occasional and not a regular practice which indicates less recognition for the argument of using guadruple helix model of actors to create added value for public policymaking (Cai and Etzkowitz 2020). The government appears to be the most consistent and regular actor group in the higher education policymaking ecosystem. This is not surprising because according to Scott (2018) public policymaking regularity where all key actors are equitably represented and participate fully at the policymaking table, hardly exists in practice. He argues that public policymaking is characterised by silences and absences. Besides, there appears to be no legal framework and institutional arrangements requiring all the guadruple helix elements to be activated in every higher education public policymaking and therefore some of the actor groups are likely to participate on an ad-hoc basis. Nonetheless, given the key role of academia, industry and civil society organisations in contemporary higher education provision and funding, their regular and consistent participation in higher education public policymaking seems beneficial for enriching higher education policies. On other hand, the sparing participation of industry and civil society does not imply the absence of influence on the policymaking agenda setting because policy actors could be decision-makers or decision influencers (Scott 2018). It is just that government, which is usually the authorising agent of public policy (Bacevic and Nokkala 2020), ultimately makes the public policy decisions (Birkland 2016; Scott 2018). Though industry and civil society may not be conspicuous in the policymaking process, they could still influence policy decisions greatly because all policy actors are regarded as policy entrepreneurs who will usually directly or indirectly push for the interest they represent (Weible 2018). The industry and civil society's low participation in policymaking is whether a situation of disinterest in higher education or lack of capacity to contribute meaningfully into higher education policymaking could not be articulated by the study informants. If it is a lack of commitment, that should be surprising given the high level of graduate unemployment and the industry's constant cry for skill mismatch (Nudzor and Ansah 2020). On the other hand, if it is a lack of policymaking capacity, it is understandable because industry and civil society interest in higher education in the West African region are only emerging (Moonga 2020).

The findings of the study have made it clear that there is less recognition of any articulated value in the use of quadruple helix model for higher education policymaking in Ghana even though researchers argue for its added value in public policymaking to achieve better policymaking outcomes (Jowi 2009). It is plausible to argue that the less recognition of the quadruple helix concept in higher education public policymaking in this case study could be due to the absence of regulatory and institutional structures and mechanisms/strategies to facilitate its use. Civil society organisations (CSOs) operating in higher education are difficult to come by in Ghana because they are now emerging (Moonga 2020). There also seem to be no regulatory frameworks to facilitate industry participation in higher education policymaking. Of course, the findings of this study indicate evidence of governments' appointments of certain individuals from industry to serve on committees working on higher education policies; this might not demonstrate the independent representation of industry in higher education policymaking. The new shape reflective of the observed ecosystem of higher education public policymaking in Ghana could be depicted as found in Figure 2.

It could also be argued that the operationalisation of the quadruple helix model in the higher education public policymaking ecosystem of Ghana takes on a different shape to reflect the existing public decision-making structures that probably work in the context of the country. The actor relationship and influence in the ecosystem appear asymmetrical. The government helix is more dominant in the policymaking space by taking a 'lion's share' of the ecosystem. Study participants ascribed this state of affairs to the government's privileged position of state power and its associated social and economic capital from international development partners. Plausibly, the eventual quadruple helix shape could be described as critical hybridity application of democratic decision-making arrangements that work for the country (Poloma and Szelényi 2019). The shape of Figure 2 depicts Ghana's own type of democracy in public policymaking setting.

However, the appeal of the quadruple helix also lies with the quest to broaden the knowledge base for policymaking in higher education to achieve good policies. It is believed that each helix presents a unique set of evidence to enrich policymaking, particularly when evidence-informed policymaking argument appears to be gaining stronger grounds than evidence-based policymaking (Scott 2018; European Commission/EACEA/Eurydice 2017; Scott 2018). European Commission/EACEA/Eurydice (2017) argues that policy decision-making in education should strategically aim for improvements in education and training, and for this purpose, research and other pieces of evidence are needed.

Notwithstanding, it is instructive to note that when it comes to the knowledge base and the evidence for higher education policymaking as identified in the Ghanaian case, the academic informants mainly stress the low level of commitment to research evidence

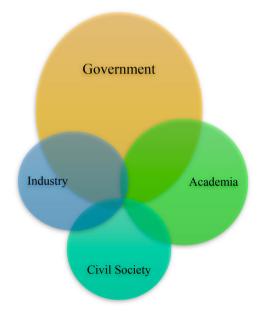


Figure 2. Quadruple helix actors in Ghana's higher education public policymaking.

of which William and Flora Hewlett Foundation (2018) attempts four possible reasons for this situation. Firstly, the research efforts are likely not have been built around real-world higher education policy questions, and findings not have been made understandable to non-technical audiences precisely when they can be used for policy decision-making. Secondly, policy decision-makers may not be motivated to use research evidence that may not be harmonious with their political persuasions or value systems. Thirdly, there could be a lack of capacity to commission research to generate higher education policy-relevant evidence for policymaking. Fourthly, the relationships of mutual trust and respect, and exchange of ideas and learning may not exist among the policy actors.

The use of evidence is also linked to issues of power in policymaking, which is about whose agenda prevails in the ultimate policy decisions that are made (Bacevic and Nokkala 2020). In this sense, power-play revolves around the cultural, political, knowl-edge, and economic demands of the policy agenda. Power may shift among the policy actors depending on the particular policy agenda. In this study, the pendulum of power appears to swing usually in the direction of government within the quadruple helix actor framework. This is probably so because, in the context of Ghana, governments who hold the political power of the citizenry also provide the most significant portion of funding for higher education. Evidence in the findings also reveals that government has the support of external development partners like the World Bank who uses its financial capital to push through its agenda in higher education policymaking.

In this discourse of higher education public policymaking, one of the major challenges to achieving successful implementation of progressive higher education policies revealed in the study is ineffective consensus-building in the policymaking enterprise. Participants have expressed this concern variously in some of the participants' quotes presented earlier.

This situation could be due to what William and Flora Hewlett Foundation (2018) argues that the relationships of mutual trust and respect, and exchange of ideas and learning may not exist among the policy actors to facilitate consensus-building which is critical for successful implementation of progressive policies.

# 7. Conclusion

Essentially, this paper has provided insights on higher education policymaking in Ghana with respect to the network of key actors in the provision of higher education. The paper illuminates the higher education policymaking ecosystem from the quadruple helix perspective of public policymaking. The study reveals that government appears to be the most dominant actor in the ecosystem of higher education policymaking in Ghana and the pendulum of power in the policymaking process swings in favour of the government due to political and financial capital. Additionally, the paper sheds light on the insufficient application of research evidence in higher education policymaking with over-reliance on experiences and policy-borrowing. Besides, ineffective consensus-building in the policymaking enterprise appears to be a major block to achieving successful implementation of progressive higher education policies in Ghana. Against the backdrop of these insights from the study, the paper concludes that the argued value of using quadruple helix framework for higher education public policymaking is less recognised in Ghana. The paper recommends a national dialogue around higher education public policymaking in Ghana

to rethink the value of quadruple helix framework of policymaking to improve the higher education public policymaking to achieve good public policies to drive quality higher education outcomes. The paper recommends again that governments and development partners of Ghana should invest in higher education policy research and also encourage consensus-building to improve higher education policies for better higher education outcomes.

# 8. Limitations

The limitations of this paper are two-folds; firstly, it is based on an illustrative case study of one country and does not allow for a realistic generalisation to cover all the different higher education systems in Africa. Nonetheless, the findings demonstrate evidential realities of higher education policymaking of a country on the continent of Africa. Secondly, the paper cannot insulate itself from the weakness inherent in the quadruple helix model where it is acknowledged that the model is normative in nature and does not offer analytical power for comparison. Notwithstanding, it serves the paper's purpose of providing contextual insights rather than a comparative analysis.

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